

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous listings and versions of claims in this application.

1-9. (Cancelled)

10. (Previously Presented) A punching apparatus for punching a guide notch in a strip of a polymer zipper, said zipper having a female track and a male track, said punching apparatus comprising:

a housing having a first slot, a second slot, and an open region between said first and second slots, said first and second slots defining a slot plane extending therebetween, said slot plane having upper and lower slot plane boundaries corresponding to respective upper and lower edges of said first and second slots;

a punch slideably moveable within said open region, said punch entering said open region orthogonal to said slot plane defined by said first and second slots, at least a portion of said punch being aligned with one of said upper and lower slot plane boundaries; and

a guide slideable into said open region, said guide entering said open region in a plane that is generally parallel to said slot plane.

11. (Previously Presented) The punching apparatus of claim 10, wherein said punch is adapted to cut through said zipper when said punch enters said open region, creating a guide notch.

12. (Previously Presented) The punching apparatus of claim 11, wherein said guide notch in said zipper is bounded on two ends by said male and female tracks, and said guide is adapted to engage at least one of said male and female tracks to guide said zipper through said punching apparatus.

13. (Original) The punching apparatus of claim 12, wherein said guide has a stepped edge to engage at least one of said male and female tracks.

14. (Original) The punching apparatus of claim 13, wherein said stepped edge is beveled in the

direction of movement of said zipper, creating an angled step and acting as a ramp for at least one of the male and female tracks of said zipper.

15. (Original) The punching apparatus of claim 12, wherein said guide has a beveled edge in the direction of movement of said zipper through said punching apparatus, said beveled edge acting as a ramp for at least one of said male and female tracks of said zipper.

16. (Original) The punching apparatus of claim 15, wherein said guide is beveled at an angle of approximately four to approximately six degrees.

17. (Previously Presented) The punching apparatus of claim 11, wherein said punch is adapted to create said guide notch such that said guide notch is formed by a plurality of edges.

18. (Previously Presented) The punching apparatus of claim 17, wherein said punch is adapted to create said guide notch such that said guide notch is U-shaped, bounded on three sides by said edges.

19. (Previously Presented) The punching apparatus of claim 17, wherein said punch is adapted to create said plurality of edges such that said plurality of edges comprise a first edge, said first edge beginning at said male and female tracks and extending downward into said fins below said male and female tracks, a second edge beginning at an end of said first edge and extending perpendicular to said first edge along said fins, and a third edge beginning at an end of said second edge opposite said first edge, and extending upward through said fins through said male and female tracks, said third edge generally parallel to said first edge.

20. (Original) The punching apparatus of claim 10, wherein said guide has a width approximately equal to the width of said punch.

21. (Original) The punching apparatus of claim 10, wherein said guide has a width approximately 15 to approximately 30% less than the width of said punch.

22. (Original) The punching apparatus of claim 10, wherein said punch is within approximately 0.0004 inches of said housing.

23. (Original) The punching apparatus of claim 10, wherein said first and second slots form track receiving openings to receive said male and female tracks, said track receiving openings being larger than the rest of said first and second slots, and said track receiving opening on said second slot is larger than said track receiving opening on said first slot.

24. (Original) The punching apparatus of claim 10, wherein said guide is adapted to engage at least one of said male and female tracks and to guide said male and female tracks through said second slot.

25. (Previously Presented) A punching apparatus for cutting a guide notch into a zipper of a polymeric bag, comprising:

a housing forming an opening on the inside of said housing, a first slot in said housing leading said zipper into said opening and a second slot leading said zipper from said opening;

a punch in slideable engagement with said opening, said punch creates a guide notch in said zipper in response to being moved into said opening while said zipper is present; and

a guide mechanism for sliding into said opening and disposed generally perpendicular to a direction of movement of said punch, said guide engaging ends of said guide notch and guiding said zipper to said second slot when said zipper is being advanced to another position.

26. (Withdrawn) The apparatus of claim 25, wherein said housing further forms a guide slot, shaped to receive said guide and in communication with said opening, wherein said guide slot has a width that is approximately equal to a width of said punch.

27. (Original) The apparatus of claim 25, wherein said housing further forms a guide slot shaped to receive said guide and in communication with said opening, said guide slot having a width that is approximately 15 to approximately 30% less than the width of said punch.

28. (Currently Amended) A punching apparatus for cutting a guide notch into a zipper of a polymeric bag, comprising:

a housing having a channel with a guide notch cutting region at an intermediate section of said channel;

a punch slideable within said channel and cutting said guide notch in said zipper when advancing through said guide notch cutting region of said channel, said guide notch having a leading edge and a trailing edge defined with respect to the movement of said zipper relative to said housing;

a first zipper guide slot formed in said housing for guiding said zipper into said guide notch cutting region;

a second zipper guide slot formed in said housing for guiding said zipper from said guide notch cutting region; and

a guide mechanism that slides into said channel, said guide mechanism disposed to engage and guide guiding said trailing edge of said guide notch to said second zipper guide slot.

29. (Previously Presented) The punching apparatus of claim 28, wherein said first and second zipper guide slots form track receiving openings to receive a portion of said zipper that is larger than the rest of said first and second zipper guide slots, and said track receiving opening on said second zipper guide slot is larger than said track receiving opening on said first zipper guide slot.

30. (Previously Presented) The punching apparatus of claim 28, wherein said guide mechanism has a stepped edge to engage said trailing edge of said guide notch to said second zipper guide slot.

31. (Withdrawn) The punching apparatus of claim 30, wherein said stepped edge is beveled in a direction with respect to the movement of said zipper, creating an angled step and acting as a ramp for at least one of said male and female tracks of said zipper.

32. (Withdrawn) The punching apparatus of claim 28, wherein said guide mechanism has a width approximately equal to the width of said punch.

33-40. (Cancelled)